

WHAT IS CLAIMED IS:

1. A mine transportation management system, comprising:
 - a plurality of self-propelled vehicles each having
 - 5 communication means and being identifiable;
 - a plurality of vessels each having communication means
 - and being identifiable;
 - at least one loading machine having communication
 - means and loading an object to be loaded into at least one
 - 10 vessel out of said plurality of vessels;
 - a processing facility; and
 - a management center having communication means,
 - wherein each of said plurality of self-propelled vehicles
 - is connectable to and separable from each of said plurality of
 - 15 vessels; and
 - wherein said management center selects a vessel to be
 - transported and selects a self-propelled vehicle for transporting
 - said selected vessel from said plurality of self-propelled
 - vehicles and said plurality of vessels, based on a transportation
 - 20 demand signal from said processing facility, and transmits a
 - transportation command signal to said selected self-propelled
 - vehicle, whereby said selected self-propelled vehicle connects
 - to said selected vessel and travels to said processing facility.
- 25 2. The mine transportation management system according

to Claim 1,

wherein said management center transmits a travel
command signal to said selected self-propelled vehicle after
said selected self-propelled vehicle discharges the loaded
5 object to said processing facility, and makes said selected
self-propelled vehicle travel to a designated position and
separate said selected vessel therefrom.

3. A mine transportation management method,
10 wherein a management center having communication
means receives signals from a plurality of self-propelled
vehicles each having communication means and being
identifiable, signals from a plurality of vessels each having
communication means, being connectable to and separable from
15 said plurality of self-propelled vehicles and being identifiable,
and a signal from at least one loading machine having
communication means and loading an object to be loaded into at
least one vessel out of said plurality of vessels;

wherein a vessel to be transported is selected from said
20 plurality of vessels based on a transportation demand signal
from a processing facility to which the loaded object is
discharged;

wherein a self-propelled vehicle for transporting said
selected vessel is selected from said plurality of self-propelled
25 vehicles; and

wherein said selected self-propelled vehicle connects to said selected vessel and travels to said processing facility by a transportation command signal being transmitted to said selected self-propelled vehicle from said management center.